



1952

A study of the relationship between the financial status and the certificated personnel of selected secondary school districts of San Joaquin County

Earl Loren Klapstein
University of the Pacific

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A STUDY OF THE RELATIONSHIP BETWEEN THE FINANCIAL
STATUS AND THE CERTIFICATED PERSONNEL OF SELECTED
SECONDARY SCHOOL DISTRICTS OF SAN JOAQUIN COUNTY

1952

A Thesis

Presented to

the Faculty of the Department of Education

College of the Pacific

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Earl Loren Klapstein

August 1952

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CHAPTER I

INTRODUCTION

Introductory statement. This study represents a survey of selected high school districts of San Joaquin County and their proportionate financial status, which has a direct bearing on the faculties of the respective schools. Discussions of the premise that the academic preparation and experience of a school faculty is dependant upon the amount of money to which a school district has access is of interest to educators such as Benjamin Fine¹ who feels that the better teachers are to be found in well-financed schools.

If the quality of educational opportunity for high school students is related to moneys of school districts, it would seem important to know if and where inequities exist so that knowledge could be available to use in the constant struggle to provide equal educational opportunity to all youth. However, no study has ever been made to ascertain whether the four year high schools of San Joaquin

¹ Benjamin Fine, Our Children are Cheated (New York: Henry Holt and Company, 1947), pp. 23-32.

county do offer instruction to their students comparable to the wealth of the individual districts.

Much interest in the specific phase of school wealth and teachers has led to a parallel study in this county. John W. Hartnett, Jr.,² principal of the Houston Elementary School, San Joaquin County, has conducted a survey of selected elementary schools of San Joaquin County to determine the relationship of school finance to teacher training and experience in the elementary field of education.

Statement of the problem. The problem for this study consists of a question: Is there a relationship between the financial status and the academic preparation and experience of teachers in selected secondary school districts of San Joaquin County? The purpose of this study will, therefore, be to determine the relationship between financial status of the school district and the academic preparation of employed certificated personnel in selected secondary schools of San Joaquin County.

² John W. Hartnett, Jr., "A Study of the Relationship Between the Financial Status and the Certificated Personnel of Selected Elementary School Districts of San Joaquin County," (unpublished Master's Thesis, College of the Pacific, Stockton, 1952).

Delimitation of the study. This study has been delimited as described below:

The selected secondary schools of this study include all public four year high schools of San Joaquin County with the exception of the Stockton Unified School District, which has a K-6-4-4 school organization plan. The following school districts comprise the selected schools: Escalon Union High School, Linden Union High School, Lodi Union High School, Manteca Union High School, Ripon Union High School, and Tracy Union High School.

The academic preparation and experience of the teachers is limited to the one hundred and seventy secondary teachers of the selected schools for the 1951-1952 school year.

The financial status of the schools has been limited to the assessed valuations for the year July 1, 1951, to June 30, 1952.

Justification for the study. The justification for the study is found in the need to investigate whether school boards of the various selected secondary schools of San Joaquin County employ teachers in relation to the amount of money available from assessed valuations. The amount of wealth per teacher, the type of teachers now teaching, and the objectives of research justify this study.

Sources of data. The data for this study were obtained from the following sources: (1) public records of the California State Department of Education, (2) public records of the office of the San Joaquin County Superintendent of Schools, (3) statutes and amendments to the California Education Code, (4) critical literature in the field, and (5) questionnaire results of selected teachers of San Joaquin County.

Statement of procedure. Two techniques of procedure were used to complete this survey. The first technique used involved a list of questions and answers needed concerning the financial status of the selected secondary school districts.³ The second procedure consisted of securing the answers to a list of questions about the academic preparation and experience of the teachers in the selected secondary schools.⁴

Definition of terms. To facilitate the digest of a study of this nature it is convenient to clarify abbreviations and terms often used. These terms are as listed below:

³ Infra, Appendix A.

⁴ Infra, Appendix B.

Assessed Valuation (A.V.) is the taxable wealth of a geographical area on which public agencies depend for their financial existence.

Assessed Valuation per Teacher (A.V./Teacher) is the amount of taxable wealth available per teacher employed by a school district.

Credentials refer to the type of credentials held by various teachers of San Joaquin County, as specified in the Education Code of the state of California.⁵

The definitions of the terms: associate degree, bachelor's degree, college unit, doctor's degree, and master's degree have been derived from (and are located alphabetically in) the Dictionary of Education.⁶ These definitions (as pertaining to the study) are:

Associate Degree is the type of degree and title usually conferred for the completion of two years of college beyond the high school, or for the completion of the curriculum of a junior college.

Bachelor's Degree is the first degree in arts and sciences or in certain professional and technical fields, the requirements usually including four years of work of

⁵ Education Code of California (Sacramento, California: State Department of Education, 1961).

⁶ Carter V. Good, editor, Dictionary of Education (New York: McGraw-Hill Company, Inc., 1948), pp. 1-495.

college grade.

College Unit is the amount of credit given for one hour of class per week during one term or semester of college study.

Doctor's Degree is the highest academic degree for attainment in graduate study.

Master's Degree is an academic degree of advanced character, usually a second degree, ranking above the bachelor's degree, and below the Ph.D., Ed.D., or other equivalent doctor's degrees.

CHAPTER II

RELATED STUDIES

Purpose of the chapter. The purpose of this chapter is to present the summaries of findings which are indirectly related to this study. For the purpose of research, the summaries are divided into the two phases applicable to the study. These are: I. Procurement and Experience of Teachers, and II. Finance as Related to the Educational Program. Each phase is concerned with the contribution of others. Writings reviewed here are not directly related because studies of the nature of the one reported in this paper are obscure or nonexistent.

I. PROCUREMENT AND EXPERIENCE OF TEACHERS

Ray C. Maul,¹ director of the study, "Teacher supply and Demand in the United States,"² which was sponsored by the National Commission on Teacher Education and Professional Standards, discussed the supply and

¹ Ray C. Maul, "A Look at Our Teacher Personnel Needs," American School Board Journal, 124:22-30, April, 1932.

² Ibid., p. 29.

demand of teachers on the national level. He revealed that the colleges and universities of the nation consistently produce, from year to year, graduates qualified for high school certificates to about twice the number needed to fill all the vacancies. Of the total 1950 production of 86,000 high school teaching eligibles, it was noted that there were only 47,600 opportunities for employment. In the 1951 class of teaching eligibles, the 77,000 candidates had job opportunities in less than 50,000 positions. The number of new teachers needed annually for the next four years will remain at about 50,000. Then a slow increase for two years will precede a rapid demand. High schools and their populations will not grow rapidly until 1956 or 1957, and then the growth nationally will be rapid until 1962-1964. He also stated that,

Facts indicate that one of the tasks of the secondary level is to adopt the preservice preparation to the needs of the modern high school rather than to increase the total number of available candidates.³

N. Blaine Winters⁴ tells that prior to 1948 there were no supply and demand figures on a national basis.

³ Maul, loc. cit.

⁴ N. Blaine Winters, "Teacher Supply and Demand," Official Group Reports of the Bowling Green Conference (Washington, D.C.: National Education Association of the United States, 1946), pp. 73-80.

and, although we now have national figures, it is still necessary to compute supply in terms of the need in each state. An individual might be counted as part of a supply in one state and not qualify in another state because of variation in certification standards. It is contended, because of this reason, current supply must be measured on a state basis.

In a report sent to the Teacher Education Institutions of the State of California on April 25, 1958, by the California State Department of Education, Division of State Colleges and Teacher Education, Credentials Office,⁵ the teacher supply and demand in the State of California was discussed. In discussing the secondary situation, it is revealed that in 1951 California trained 145 per cent more secondary teachers than were needed, and this year it is training 70 per cent more secondary teachers than are needed. Compared with demand, the state is training two secondary teachers where one is needed, in contrast to the elementary level where one is prepared for two needed. It is suggested that many general secondary candidates should

⁵ "Teacher Supply and Demand," Report to Teacher Education Institutions (Sacramento, California: California State Department of Education, April 25, 1958), pp. 1-5.

quality for the regular elementary credential. In California by 1956, there will be a shortage of 22,500 teachers, with the shortage all at the elementary level. The California teacher institutions can supply the need on the secondary level if the present rate of output is continued. As to the future, the report said:

In the next five years, California's school enrollment will be increased by 700,000. About 75 per cent of this enormous increase will be in elementary school enrollment. A significant increase in secondary school enrollment will occur in 1956 when the first wave of elementary pupils begin to enter high school. To care for this enlargement, and to replace those who die, resign, or retire, California will need 62,000 NEW teachers in the next five years--45,000 elementary and 17,000 secondary teachers. More than two-thirds of these teachers will be needed for elementary schools and slightly less than one-third for secondary schools.⁶

In a survey conducted in 1941, by the Research Division of the National Education Association,⁷ particular reference is made to the educational requirements set up by school boards for teachers to be employed. The results of this survey came from a 49.8 per cent reply to 3,615 questionnaires sent to administrators of all size school districts. The requirements for teachers on a national

⁶ Ibid., p. 2.

⁷ "Teacher Personnel Procedures: Selection and Appointment," National Education Association Research Division, National Education Association Research Bulletin, 20:53-76, March, 1942.

scale were found to be:

| | | |
|------------------------|---|---------------------------|
| one year of college | - | less than $\frac{1}{2}\%$ |
| two years of college | - | 1% |
| three years of college | - | less than 1% |
| four years of college | - | 87% |
| five years of college | - | 12% |

The results of a questionnaire sent to 4,375 city superintendents of schools in the nation in 1951 in which a 37 per cent reply was made, concerning personnel practices in school districts, is given in a report by the Research Division of the National Education Association.⁸ The educational requirements for teachers as set forth by schools throughout the nation are as follows:

| | | |
|------------------------|---|---------------------------|
| one year of college | - | 0% |
| two years of college | - | less than $\frac{1}{2}\%$ |
| three years of college | - | less than $\frac{1}{2}\%$ |
| four years of college | - | 89% |
| five years of college | - | 10% |

According to Maul,⁹ a minimum requirement of the bachelor's degree for teachers is regularly maintained in all states and in all fields, except in some vocational subjects in which practical experience is recognized in lieu of formal training. The need to improve the quality

⁸ "Teacher Personnel Practices, 1950-51: Appointment and Termination of Service," National Education Association Division, National Education Association Research Bulletin, 30:3-31, February, 1952.

⁹ Maul, loc. cit.

of the new high school teacher's preparation in terms of changing needs of high school students is apparent.

Benjamin Fine¹⁰ reveals the following information concerning emergency certificates granted to teachers throughout the nation from 1941 to 1947. This information does not separate secondary from elementary.

| | | |
|---------|---------|--------------------------------|
| 1940-41 | 2,300 | Emergency certificates granted |
| 1941-42 | 4,685 | Emergency certificates granted |
| 1942-43 | 38,385 | Emergency certificates granted |
| 1943-44 | 69,423 | Emergency certificates granted |
| 1944-45 | 78,665 | Emergency certificates granted |
| 1945-46 | 108,932 | Emergency certificates granted |
| 1946-47 | 123,492 | Emergency certificates granted |

Finell further reveals that as of 1946-1947, the California emergency certificated personnel constituted 23.5 per cent of its teaching staff. However, this is not broken down between secondary and elementary.

In the report sent to the Teacher Education Institutions of the State of California on April 25, 1952,¹² it was noted that 7 per cent (6,148) of California's

¹⁰ Benjamin Fine, Our Children Are Cheated (New York: Henry Holt and Company, 1947), pp. 23-24.

¹¹ Loc. cit.

¹² "Teacher Supply and Demand," Report to Teacher Education Institutions, op. cit., p. 3.

teachers are emergency teachers, and that 14 per cent of San Joaquin County's teachers are on emergency credentials. This was not separated between secondary and elementary.

The qualifications for general secondary credentials in the State of California are prescribed in the California Administrative Code.¹³

In the 1941 report by the Research Division of the National Education Association¹⁴ the experience requirements for teachers in senior high schools by school districts were found to be as follows:

| | | |
|---------------------------------|---|-----|
| no experience | - | 56% |
| one year experience | - | 11% |
| two year experience | - | 27% |
| more than two years experience- | | 6% |

To contrast the experience requirements of 1941 to 1951, the results of the report made by the National Education Association Research Division in 1951¹⁵ are given on the following page:

¹³ California Administrative Code (Sub-chapter 2 of Title 5. Sacramento: State Department of Education, 1951), 108 pp.

¹⁴ "Teacher Personnel Procedures: Selection and Appointment," National Education Association Research Bulletin, loc. cit.

¹⁵ "Teacher Personnel Practices, 1950-51: Appointment and Termination of Service," National Education Association Research Bulletin, op. cit., pp. 114-125.

| | | |
|---------------------------------|---|-----|
| no experience | - | 86% |
| one year experience | - | 3% |
| two years experience | - | 9% |
| more than two years experience- | | 2% |

The most significant difference is the increase of 30 per cent in accepting inexperienced teachers by the school districts, and the decrease of 18 per cent by school districts to require two years' previous experience as a qualification for employment.

II. FINANCE AS RELATED TO THE EDUCATIONAL PROGRAM

Benjamin Fine,¹⁶ in discussing educational inequalities in relation to finance, supports Paul R. Mort's contention that "money is the best single index of the quality of education." The author, Fine, further believes that the well-financed schools provide the best teachers. It is indicated that the nation's schools spend from \$100.00 to \$6,000.00 a year for their classroom units, and consider class units as twenty-seven students for the secondary, and thirty students for the elementary. Some children are thus put to a handicap as high as sixty to one in starting their educational life in certain sections of the country when considering the expenditure of \$6,000.00 against \$100.00.

¹⁶ Fine, *op. cit.*, pp. 114-125.

In discussing the importance of ample school revenue, Reeder¹⁷ is of the opinion that the efficiency of schools is determined largely by the amount of available school revenue. All phases of the school program are affected by the amount of money on hand, including the qualifications of school employees. It is pointed out that schools have always been criticized for certain shortcomings, and they are being criticized today for inadequately trained and inexperienced teachers along with poor school buildings, equipment, books, and supplies. Criticisms along these lines have merit and should be readily admitted. The author, Reeder, however, said: "It cannot be gainsaid, though, that these deficiencies are being gradually corrected, and when they are corrected more revenue is usually necessary."¹⁸

While studying school finance in public relations, the American Association of School Administrators¹⁹ was quite concerned. It was acknowledged that there is a

¹⁷ Ward G. Reeder, The Fundamentals of Public School Administration (New York: The Macmillan Company, 1941), pp. 353-377.

¹⁸ Ibid., p. 353.

¹⁹ American Association of School Administrators, "Public Relations for America's Schools, Twenty-eighth Yearbook of the National Education Association, 1950, pp. 225-248.

reciprocal relationship between the quality of education and the level of support from finances. The quality of the educational program is usually, though not invariably, a function of the degree of support. Level of support is dependent upon the character of educational service and the extent to which people understand it.

C. A. Weber,⁸⁰ professor of education at the University of Connecticut, is of the belief that practice of economy is a responsibility the school board members have to the taxpayers, but that economy in respect to teachers should be interpreted as procuring and retaining the best teachers a community can afford. The main responsibility of the local board is the children of the district, and the teachers who teach the children. Growth, in the professional service of teaching, should be the measuring device for economy. It is pointed out that teachers who have continuous professional growth are doing the best teaching job because they understand the job that must be done, and they have ability to devise better plans for the achievement of educational goals.

⁸⁰ C. A. Weber, "Teacher and the Boards of Education," American School Board, 124:85-87, February, 1952.

CHAPTER III

THE FINANCIAL STATUS

Purpose of the chapter. The purpose of this chapter is to discuss the first method of procedure and data used to complete this study. The first technique employed the following plan: (1) comparison and rank of the assessed valuations of the selected school districts, and (2) comparison and rank of assessed valuations per teacher in the select school districts. The research procedure of tabulating financial data as a method of attack provided the necessary information to establish the financial status of the selected districts.

Plans for the financial study. The plans for a financial study of the selected school districts were discussed extensively with faculty members of the College of the Pacific's School of Education. Other studies were examined, and literature related to school finance was investigated.

To compile data that would be reliable, official, and up-to-date, the public records of the California State Department of Education seemed to provide the most suitable source for a satisfactory approach to planning the financial study.

It was decided to use the Principal Apportionment of the California State School Fund,¹ for 1951-1952, as the source of data. The assessed valuations of the selected schools were compiled from this source. To associate the finances with the number of teachers in the selected school districts for the 1951-1952 school year, the public records of the Office of the Superintendent of Schools of San Joaquin County were used. The information from this financial study was to be studied through the use of tables.

Construction of the tables. Similar financial studies were examined and suitable preliminary tables² were constructed to best fit this financial study. The selected school districts were arranged alphabetically on all the preliminary tables.

Computation and tabulation of the data. When the tables were constructed, the information was tabulated according to size and rank in the proper spaces provided.

¹ Principal Apportionment of the California State School Fund (Sacramento, California: California State Department of Education, March, 1952).

² Infra, Appendix C.

Interpreting the results. The results of the financial study are interpreted by studying the tables and making the necessary explanations relative to the presentation of the data.

Table I indicates the size of the selected school by the number of employed teachers. The selected secondary schools of this study varied in size in respect to measurement in numbers of teachers employed by a given school district as shown in Table I. The schools can be classed for this study as one large school--Lodi Union High School; two medium-sized high schools--Tracy Union High School and Manteca Union High School; and the three small union high school districts of Escalon, Linden, and Ripon. The mean number of teachers employed by each school was found to be twenty-eight.

The assessed valuations of the various school districts are ranked downward from one to six by wealth as indicated in Table II, page 31. The school districts also showed marked differences in financial status within one given county. The assessed valuations ranged from a low of \$6,028,260.00 to a high of \$57,139,625.00. The assessed valuations alone do not give a clear and definite view of district wealth by any unit system, but they do show existing inequalities when related to geographic

TABLE I

NUMBER OF TEACHERS IN SELECTED SECONDARY
SCHOOLS IN SAN JOAQUIN COUNTY, 1951-1952

| School district | Number of teachers |
|--------------------|--------------------|
| Elipon Union High | 14 |
| Linden Union High | 16 |
| Escalon Union High | 17 |
| Manteca Union High | 29 |
| Tracy Union High | 33 |
| Lodi Union High | 62 |

TABLE II

ASSESSSED VALUATIONS OF SELECTED SECONDARY
SCHOOLS OF SAN JOAQUIN COUNTY, 1951-1952

| School district | Assessed Valuation | Rank |
|--------------------|-----------------------|------|
| Lodi Union High | \$57,139,825.00 | 1 |
| Tracy Union High | 27,471,325.00 | 2 |
| Manteca Union High | 15,068,475.00 | 3 |
| Escalon Union High | 11,675,590.00 | 4 |
| Ripon Union High | 8,681,110.00 | 5 |
| Linden Union High | 8,028,280.00 | 6 |

conditions and imposed boundary lines within San Joaquin County. The mean assessed valuation of the school districts was found to be \$21,334,064.16.

To facilitate this study a method of showing assessed valuations by teacher-unit was devised.

The assessed valuation of each of the selected school districts was divided by the number of teachers of that school to show the assessed valuation per teacher employed. (Assessed valuation divided by the number of teachers equals assessed valuation per teacher.) The figures obtained were put in Table III, and ranked downward one to six according to the available teacher wealth. This unit system provided a method of relating teachers and finance by making comparison of the wealth of the district and the teachers employed by the district. Instead of using the usual system of showing comparative wealth in terms of assessed valuation per average daily attendance, the unit system of assessed valuation per teacher was more applicable to the study. This system was used on the advice of the thesis chairman.

The mean assessed valuation per teacher employed was found to be \$685,247.33. The difference of wealth between the lowest district--Manteca High School--and the highest district--Lodi High School--was a total of

TABLE III

ASSESSED VALUATIONS PER TEACHER EMPLOYED IN
SELECTED SECONDARY SCHOOLS OF SAN JOAQUIN COUNTY,
1951-1952

| School District | Assessed Valuation per teacher | Rank |
|--------------------|-----------------------------------|------|
| Lodi Union High | \$921,607.00 | 1 |
| Tracy Union High | 832,464.00 | 2 |
| Escalon Union High | 686,799.00 | 3 |
| Hipon Union High | 615,794.00 | 4 |
| Linden Union High | 535,217.00 | 5 |
| Manteca Union High | 519,603.00 | 6 |

\$402,004.00, when referring to assessed valuation per teacher. This difference would provide Lodi with almost twice as much wealth per teacher as Mantega, if equal tax rates were used. The range of assessed valuation per teacher in selected high school districts of the study was from \$519,603.00 to \$921,607.00. Available wealth often dictates the minimum and maximum salaries of a district and reflects on the employment of teachers.

CHAPTER IV

THE QUESTIONNAIRE AND LISTING OF CREDENTIALS

Purpose of the chapter. The purpose of this chapter is to describe the second technique of attack used to complete this study. The second procedure employed was divided into two processes: I. The Direct Questionnaire, and II. The Listing of Credentials. By the utilization of the research procedures of a questionnaire and listing of credentials, this second method provided the necessary information for a compilation of data pertaining to the academic preparation and experience of the one hundred and seventy secondary teachers in the select schools.

Plans for the questionnaire. The plans for a questionnaire in the study of the academic preparation and experience of the selected teachers involved discussion of plans with faculty members of the College of the Pacific's School of Education, San Joaquin County Superintendent of Schools, administrators, and teachers in the field, examination of surveys, and investigation of literature having to do with teacher employment. The consensus of opinion seemed to be that a direct and nonpersonal type of an objective questionnaire would be the most suitable approach. This approach necessitated an objective

questionnaire with emphasis on brevity of reply, authorization, and attractiveness to secure the necessary returns. It was thought that the questionnaire should be self-explanatory, as it was neither important nor desirable to listen to the personal comments of the recipients of the questionnaire.

I. THE DIRECT QUESTIONNAIRE

The research method of using the questionnaire involved: (1) plans for the questionnaire, (2) construction of an acceptable questionnaire, (3) distribution of the questionnaire, (4) tabulation of the data, and (5) interpreting the returns.

Construction of the questionnaire. The preparatory questionnaire was constructed and prepared for sampling. Three separate samplings were obtained by submitting the questionnaire to various classes in attendance at the first 1952 summer session of the College of the Pacific. Each sample questionnaire was administered without oral instructions. After each separate sampling, revisions were made to simplify and clarify the questionnaire. After securing the approval of Mr. John R. Williams, San Joaquin County Superintendent of Schools, to mail the questionnaire and an attached letter above his name and

office, the questionnaire and letter were presented to and approved for use by the thesis committee and the Dean of the School of Education of the College of the Pacific. The final authorized questionnaire¹ and the letter² were thus ready for distribution.

Distribution of the questionnaire. The names and addresses of the one hundred and seventy selected secondary teachers were obtained from the San Joaquin County School Directory, 1951-1952.³ The questionnaire and letter were then printed and coded on double, detachable, self-addressed, and stamped United States postal cards. The questionnaires were then mailed to the selected teachers.

Tabulation of the data. When the completed questionnaires were returned, the information was tabulated. A card file was established for each school and a master teacher form⁴ was established by coding teachers per school. All the data was entered on the correct form as

¹ Infra. Appendix D.

² Loc. cit.

³ San Joaquin County School Directory (Stockton, California: Division of Education, 1951-1952).

⁴ Infra. Appendix E.

the cards were returned. This form served a dual purpose: (1) to register correspondence, and (2) to give a preliminary inspection of the over-all returns. The coded number was used to identify the teacher, and a reference number to identify the school district. This form was not intended to record information vital to the study, but only to record the response to the questionnaire.

The teacher identifying code number was arranged numerically so that the last two digits of a five serial number would correspond with the assigned number of the teacher to each respective school. The reasons for coding the teachers were to expedite the processing of the mails, to identify the teacher to the school, and to preserve identity for future study. Each school district was given an arbitrary two digit number which corresponded with the first two numbers of the five numbered serial.

The master teacher form provided spaces for address changes, data sent, data received, and whether a reminder was sent to those people who had not returned their questionnaire. August 15, 1982, was established as the closing date for counting the returns of the questionnaires in the study. The closing date is noted on the master teacher form.

Interpreting the returns. The returns of the questionnaire were as follows: 85 per cent, or a total of one hundred forty-five teachers of the selected one hundred and seventy teachers responded to the questionnaire. The range of per cent of reply of the individual schools was from a low of 73 per cent to a high of 98 per cent.

II. THE LISTING OF CREDENTIALS

The research method employed in listing the credentials held by the teachers involved the following: (1) plans for a listing, (2) preparation of a list form, (3) tabulating the credentials, and (4) interpreting the listing.

Plans for a listing. The plans for a listing of credentials evolved in the aforesaid plans for the questionnaire. It was evident that the credentials held by the teachers supplied necessary information. It was, however, learned that credentials of all San Joaquin County teachers were on file in the County Office of Education, and it was unnecessary to collect this information from a questionnaire. It was then decided to make a list of the credentials held by the teachers in each of the selected schools.

Preparation of a list form. The preparation of a list form involved designing a simple form. A self-constructed form⁵ for each school was prepared to list the pertinent credential data.

Tabulating the credentials. After securing the information from the County Office of Education to list the credentials of the teachers of the selected schools, the credentials were tabulated. The same school reference number as used in the questionnaire was maintained for this tabulation. The information tabulated on this list was vital to the study. All credentials tabulated were legal credentials as specified in the Education Code of the State of California,⁶ and legally filed with the County Superintendent of Schools.

Interpreting the listing. The listing of credentials of the selected secondary teachers resulted in a 100 per cent listing. A total of one hundred and seventy credentials of the selected secondary teachers were credited to the proper school districts.

⁵ Infra, Appendix F.

⁶ Education Code of California (Chapter I of Division 7. Sacramento: State Department of Education, 1961).

CHAPTER V

STATUS OF THE ACADEMIC PREPARATION AND EXPERIENCE OF THE TEACHERS REPORTING IN SAN JOAQUIN COUNTY

Purpose of the chapter. The purpose of this chapter is to present the applicable findings obtained from the results of the second technique used to complete the study, the questionnaire and credential list. The procedure used to show the findings involved the presentation of information pertaining to academic units, degrees, credentials, experience, and tenure on tables arranged to facilitate the study.

Plans for the presentation of the findings. The plans for presenting the findings of data on the academic preparation and experience of the teachers were thoroughly studied. It was suggested that the results of the findings be presented in a manner that could be easily examined, and that the use of general tables would be an appropriate presentation. The plans were thus formulated to utilize tables assimilating material for examination.

Construction of the tally sheet and tables. A large raw tally sheet¹ was constructed to tally the data

¹ Infra, Appendix C.

from the questionnaire and credential list, having to do with academic preparation and experience of the selected teachers.

Appropriate tables were constructed according to the financial status of the selected school districts. The tables were arranged according to an assessed valuation per teacher range of \$100,000.00. This arbitrary range was established to associate more closely academic preparation and experience in the presentation to finance and to facilitate the calculations of the correlation coefficient for the summary.

The results tallied on the tally sheet were transferred to the appropriate tables for a presentation of the findings.

Data concerning the individual schools is not applicable to the study of academic preparation and experience as related to finance, but is included in the tally sheet for inspection.

Computation and tabulation of the findings. When the tables were constructed, the information was tabulated and used in the appropriate general tables. The total per cent of teachers in each classification of wealth, and the total per cent of teachers in each classification of units, degrees, credentials, experience, and tenure is

presented. All per cents used in the tables of this chapter were computed on the basis that per cent of reply is 100 per cent and constitutes a whole answer.

Presentation of the findings. The presentation of the findings is made in the following tables. Pertinent informative data is discussed for each table.

Table IV shows the number of schools reporting that are placed in the different ranges of wealth established arbitrarily by a \$100,000.00 range of assessed valuation per teacher employed. The per cent of schools that are placed in the different ranges of wealth are also computed for the table. Figures used for assessed valuations per teacher employed were obtained from Table III, page 83. The data related to the schools was derived from the tally sheet.

The data compiled for this table is used in all other succeeding tables throughout the study to facilitate a presentation of the academic preparation and experience of teachers as related to finance, and to calculate the correlation of coefficients for the summary. The number of schools in Table IV are further broken down in the following tables of the study by the number of teachers in the schools to establish classifications.

TABLE IV

NUMBER OF SELECTED SECONDARY SCHOOLS OF
INDICATED ASSESSED VALUATION PER TEACHER EMPLOYED

| Assessed Valuation per teacher employed | Number of schools | Per cent of schools |
|--|----------------------|------------------------|
| \$900,000.00-\$999,999.00 | 1 | 16.7 |
| 800,000.00- 899,999.00 | 1 | 16.7 |
| 700,000.00- 799,999.00 | 0 | 0.0 |
| 600,000.00- 699,999.00 | 2 | 33.3 |
| 500,000.00- 599,999.00 | 2 | 33.3 |
| TOTAL | 5 | 100.0 |

Table V shows the findings of the total number of teachers responding to the questionnaire in relation to their total college semester units completed.

The total number of teachers responding in each wealth classification are tabulated and totaled horizontally, and the total per cent replying in each unit classification are computed in the vertical per cent column for Table V and in all following tables in this chapter.

The findings reveal that the totals and per cents of teachers replying in each wealth area ranged from a low of twenty-six teachers, or 17.9 per cent in the \$600,000.00-\$699,999.00 classification to a high of fifty-two teachers, or 35.8 per cent in the \$900,000.00-\$999,999.00 classification. These tabulations and per cents to wealth remain constant in all the following tables of Chapter V, with the exception of Table IX, which presents information on credentials of the teachers.

The total number of teachers reporting units in the different unit classifications are tabulated and totaled vertically, and the total per cents of teachers reporting in each unit classification are computed in the horizontal per cent column.

The findings also show that the totals and per cents of teachers reporting in each unit classification

TABLE V

NUMBER OF TEACHERS RESPONDING TO QUESTIONNAIRE
AND THEIR COLLEGE SEMESTER UNITS COMPLETED

| Assessed valuation per teacher | 0 to 29 | 30 to 59 | 60 to 89 | 90 to 119 | 120 to 149 | 150 to 179 | 180 to 209 | To- tal | Per cent |
|---|---------------|----------------|----------------|-----------------|------------------|------------------|------------------|------------|-------------|
| \$900,000.00 to \$999,999.00 | 0 | 0 | 1 | 0 | 8 | 22 | 21 | 52 | 35.8 |
| 800,000.00 to 899,999.00 | 0 | 1 | 1 | 0 | 7 | 14 | 7 | 30 | 30.7 |
| 700,000.00 to 799,999.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| 600,000.00 to 699,999.00 | 0 | 1 | 0 | 0 | 7 | 11 | 7 | 26 | 17.9 |
| 500,000.00 to 599,999.00 | 0 | 0 | 1 | 0 | 7 | 19 | 10 | 37 | 25.5 |
| TOTAL | 0 | 2 | 2 | 0 | 22 | 66 | 45 | 145 | 99.9 |
| PER CENT | 0 | 1.3 | 2.0 | 0 | 20.0 | 45.5 | 31.0 | 99.8 | |

ranged from a low of two teachers, or 1.3 per cent in the 20-59 unit group to a high of sixty-six teachers, or 45.5 per cent in the 150-179 unit class.

Table VI shows the findings of the total number of teachers responding to the questionnaire in proportion to their total number of degrees earned.

The total numbers of teachers reporting in the separate degree classifications are tabulated and totaled vertically, and the total per cent reporting in each degree class is computed in the horizontal per cent column.

The findings show that the totals and per cents of teachers reporting in each degree classification ranged from a low of five teachers, or 3.4 per cent having less than bachelor's degree to a high of one hundred teachers, or 68.9 per cent having a bachelor's degree.

Table VII, page 39, shows the total numbers of teachers replying to the questionnaire in relation to their total years of teaching experience. Years of teaching are arbitrarily set up in five year classification units for purposes of study and presentation. The total numbers of teachers replying in the different experience classifications are tabulated and totaled vertically for experience, and the total per cent of reply in each class is computed in the horizontal per cent column.

TABLE VI

NUMBER OF TEACHERS RESPONDING TO QUESTIONNAIRE
AND THEIR ACADEMIC DEGREE

| Assessed valuation per teacher | Master's Degree | Bachelor's Degree | Less than Bachelor's Degree | Total | Per cent |
|---|--------------------|----------------------|-----------------------------------|-------|----------|
| \$900,000.00 to \$999,999.00 | 19 | 32 | 1 | 52 | 35.8 |
| 800,000.00 to 899,999.00 | 7 | 21 | 2 | 30 | 20.7 |
| 700,000.00 to 799,999.00 | 0 | 0 | 0 | 0 | 0.0 |
| 600,000.00 to 699,999.00 | 4 | 21 | 1 | 26 | 17.9 |
| 500,000.00 to 599,999.99 | 10 | 26 | 1 | 37 | 25.6 |
| TOTAL | 40 | 100 | 5 | 145 | 99.9 |
| PER CENT | 27.6 | 68.9 | 3.4 | 99.9 | |

TABLE VII

NUMBER OF TEACHERS RESPONDING TO QUESTIONNAIRE
AND THEIR TOTAL TEACHING EXPERIENCE

| Assessed valuation per teacher | 1- 5 | 6- 10 | 11- 15 | 16- 20 | 21- 25 | 26- 30 | 31- 35 | 36- 40 | 41- 45 | Total | Per cent |
|--------------------------------------|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------------|
| \$900,000.00 to | | | | | | | | | | | |
| \$999,999.00 to | 18 | 8 | 7 | 7 | 2 | 8 | 1 | 1 | 0 | 58 | 35.6 |
| \$999,999.00 to | 12 | 3 | 7 | 1 | 1 | 1 | 3 | 0 | 0 | 30 | 20.7 |
| \$999,999.00 to | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| \$999,999.00 to | 18 | 8 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 26 | 17.9 |
| \$999,999.00 to | 19 | 3 | 2 | 3 | 4 | 3 | 3 | 0 | 0 | 37 | 25.5 |
| TOTAL | 65 | 19 | 19 | 12 | 7 | 13 | 9 | 1 | 0 | 145 | 99.9 |
| PAN CENT | 44.9 | 13.1 | 13.1 | 8.2 | 4.8 | 6.9 | 6.2 | .7 | 0 | 99.9 | |

The findings indicate that the totals and per cents of teachers replying in each classification of experience ranged from a low of one teacher, or .7 per cent with 35-40 years' experience, to a high of sixty-five teachers, or 44.9 per cent, with 1-5 years of experience.

Table VIII shows the total numbers of teachers replying to the questionnaire in relation to their total years of experience in their present position.

The total years of tenure in teaching position are arbitrarily set up in five year classifications for purposes of study and presentation. The total numbers of teachers replying in the different tenure classifications are tabulated and totaled vertically, and the total per cents replying are computed in the horizontal per cent column.

The findings show that the totals and per cents of teachers replying in each tenure classification range from a low of one teacher, or .7 per cent with 31-35 years' tenure, to a high of eighty-eight teachers, or 60.7 per cent with 1-5 years of tenure in present position.

Table IX, page 42, presents the findings concerning the credentials held by the total numbers of teachers as related to the credential list.

TABLE VIII

NUMBER OF TEACHERS RESPONDING TO QUESTIONNAIRE
AND THEIR YEARS OF TENURE IN PRESENT POSITION

| Assessed valuation per teacher | 1- 5 | 6- 10 | 11- 15 | 16- 20 | 21- 25 | 26- 30 | 31- 35 | Total | Per cent |
|--------------------------------------|---------|----------|-----------|-----------|-----------|-----------|-----------|-------|----------|
| \$900,000.00 to | | | | | | | | | |
| \$999,999.00 | 25 | 12 | 7 | 2 | 4 | 1 | 1 | 52 | 35.8 |
| 200,000.00 to | | | | | | | | | |
| \$99,999.00 | 15 | 4 | 4 | 0 | 3 | 3 | 0 | 30 | 20.7 |
| 700,000.00 to | | | | | | | | | |
| \$99,999.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| 600,000.00 to | | | | | | | | | |
| \$99,999.00 | 19 | 4 | 1 | 1 | 0 | 1 | 0 | 26 | 17.9 |
| 500,000.00 to | | | | | | | | | |
| \$99,999.00 | 28 | 6 | 1 | 1 | 1 | 0 | 0 | 37 | 25.5 |
| TOTAL | 68 | 26 | 13 | 4 | 8 | 5 | 1 | 145 | 99.9 |
| PER CENT | 60.7 | 17.9 | 8.9 | 2.7 | 5.5 | 3.4 | .7 | 99.8 | |

TABLE IX
NUMBER OF TEACHERS CONVERTED
AND THEIR CREDENTIALS HELD

| Assessed valuation per teacher | Regular creden- tials | Emergency creden- tials | Total | Per cent |
|---|-----------------------------|-------------------------------|-------|----------|
| \$900,000.00 to \$999,999.00 | 62 | 0 | 62 | 36.4 |
| 200,000.00 to 299,999.00 | 33 | 0 | 33 | 19.4 |
| 700,000.00 to 799,999.00 | 0 | 0 | 0 | 0.0 |
| 600,000.00 to 699,999.00 | 37 | 4 | 31 | 18.2 |
| 500,000.00 to 599,999.00 | 41 | 3 | 44 | 25.8 |
| TOTAL | 163 | 7 | 170 | 99.8 |
| PER CENT | 95.9 | 4.1 | 100.0 | |

The credentials have been classed as regular or emergency for purposes of presentation and study. The total numbers of teachers listed in both classifications are tabulated and totaled vertically, and the total per cents are computed in the horizontal per cent column.

The findings show that the totals and per cents of teachers replying in each wealth classification ranged from a low of thirty-one teachers, or 18.2 per cent in the \$600,000.00-\$699,999.00 classification to a high of sixty-two teachers, or 36.4 per cent in the \$900,000.00-\$999,999.00 classification. The difference in number of teachers in each wealth area by credentials varied from the other tables due to the 100 per cent credential listing.

CHAPTER VI

ANALYSIS OF THE FINDINGS

Purpose of the chapter. The purpose of this chapter is to analyze the findings of this study. The procedure used consisted of a presentation of tables of data concerning the academic units, degrees, credentials, experience, and tenure of the teachers employed as related to the financial rank of teacher wealth of the selected school districts. This procedure made it possible for conclusions to be drawn as to whether there is a relationship between the financial status and the academic preparation and experience of teachers in the selected secondary school districts.

Plans for an analysis of the findings. The plans for an analysis were conducted in conjunction with planning a presentation of the findings of the questionnaire and credential list as related to finance, as shown in the preceding chapter. It was decided to show a relationship through simple correlations.

Methods of correlation. To show the relationship of the five phases of teacher preparation and training to the financial status, two kinds of tables were made to make

possible the calculations of the correlation coefficient for each phase of the study. The first type of table employed to show the relationship of finance to college units, teaching experience, and tenure was derived from Croxton and Crowden's Practical Business Statistics.¹ By using the simple correlation it was possible to calculate the coefficient of correlation (r). The second type of table used to show the relationship of finance to academic degrees and credentials was the table showing the calculation of the bi-serial (r). This second table using the bi-serial relation was employed because there were only two areas to relate to financial status.

Information for the tables was taken from Tables IV, page 34, V, page 36, VI, page 38, VII, page 39, VIII, page 41, and IX, page 42.

Calculation of the correlation coefficient and the Bi-serial r . The calculations of the correlation coefficients for the college semester units, teaching experience, and tenure as related to finance are shown in Tables X, page 46, XI, page 47, XII, page 48. Table XIII, page 49, and XIV, page 50, show the bi-serial calculations of degrees and credentials to finance.

¹ Frederick B. Croxton and Dudley J. Crowden, Practical Business Statistics (New York: Prentice-Hall, Inc., 1942), pp. 424-425.

TABLE X

CORRELATION OF TABLE OF THE FINANCIAL STATUS OF THE SELECTED SECONDARY SCHOOL DISTRICTS AND THE COLLEGE SEMESTER UNITS COMPLETED BY THE TEACHERS EMPLOYED

| | | COLLEGE SEMESTER UNITS COMPLETED (X) | | | | | | | | | | | |
|----------------------|-----------------------------------|--------------------------------------|---------|----------|----------|-----------|------------|------------|------------|---|-----|----------------------------|---|
| FINANCIAL STATUS (Y) | Class Interval | Mid-value | 0 to 29 | 30 to 59 | 60 to 89 | 90 to 119 | 120 to 149 | 150 to 179 | 180 to 299 | f _y | d'y | f _y d'y | f _y (d'y) ² |
| | | | 15 | 45 | 75 | 105 | 135 | 165 | 195 | | | | |
| | | | | | | | | | | | | | |
| | \$900,000.00 to \$999,999.00 | \$950,000. | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 52 | 2 | 104 | 208 |
| | \$800,000.00 to \$899,999.00 | \$850,000. | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 30 | 1 | 30 | 30 |
| | \$700,000.00 to \$799,999.00 | \$750,000. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | \$600,000.00 to \$699,999.00 | \$650,000. | 3 | 2 | 1 | 0 | -1 | -2 | -3 | 26 | -1 | -26 | 26 |
| | \$500,000.00 to \$599,999.00 | \$550,000. | 6 | 4 | 2 | 0 | -2 | -4 | -6 | 37 | -3 | -74 | 148 |
| | | | 0 | 0 | 2 | 0 | -14 | -76 | -60 | | | | |
| | f _x | | 0 | 2 | 3 | 0 | 29 | 66 | 45 | N=145 | | Σ f _y d'y = +34 | Σ f _y (d'y) ² = 412 |
| | d'x | | -3 | -2 | -1 | 0 | 1 | 2 | 3 | | | | |
| | f _x d'x | | 0 | -4 | -3 | 0 | 29 | 132 | 135 | Σ f _x d'x = 289 | | | |
| | f _x (d'x) ² | | 0 | 8 | 3 | 0 | 29 | 264 | 405 | Σ f _x (d'x) ² = 709 | | Σ f d'x d'y = 86 | |

$$r = \frac{N \Sigma f d'x d'y - (\Sigma f d'x)(\Sigma f d'y)}{\sqrt{[N \Sigma f (d'x)^2 - (\Sigma f d'x)^2][N \Sigma f (d'y)^2 - (\Sigma f d'y)^2]}}$$

$$r = \frac{(145)(86) - (289)(+34)}{\sqrt{[(145)(709) - (289)^2][(145)(412) - (34)^2]}}$$

$$r = +.078$$

TABLE XI
CORRELATION TABLE OF THE FINANCIAL STATUS OF THE SELECTED SECONDARY SCHOOL DISTRICTS AND THE TOTAL YEARS TEACHING EXPERIENCE OF THE TEACHERS EMPLOYED

| Class Interval | TOTAL YEARS TEACHING EXPERIENCE | | | | | TEACHING EXPERIENCE | | | | fy | d'y | fyd'y | fy(d'y) ² |
|----------------------------------|---------------------------------|------------|------------|------------|----------|---------------------|-----------|----------|----------|------------------------------------|-----|---------------------|-----------------------------------|
| | 1 to 5 | 6 to 10 | 11 to 15 | 16 to 20 | 21 to 25 | 26 to 30 | 31 to 35 | 36 to 40 | 41 to 45 | | | | |
| Mid-value | 3 | 8 | 13 | 18 | 23 | 28 | 33 | 38 | 43 | | | | |
| \$900,000.00 to \$950,000.00 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 8 | 52 | 8 | 104 | 208 |
| \$950,000.00 to \$1,000,000.00 | -144 | -48 | -20 | -14 | 0 | 16 | 4 | 6 | 0 | | | | |
| \$1,000,000.00 to \$1,050,000.00 | -4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 | 30 | 1 | 30 | 30 |
| \$1,050,000.00 to \$1,100,000.00 | -48 | -9 | -14 | -1 | 0 | 1 | 10 | 0 | 0 | | | | |
| \$1,100,000.00 to \$1,150,000.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$1,150,000.00 to \$1,200,000.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| \$1,200,000.00 to \$1,250,000.00 | 4 | 3 | 2 | 1 | 0 | -1 | -2 | -3 | -4 | 26 | -1 | -26 | 26 |
| \$1,250,000.00 to \$1,300,000.00 | 16 | 5 | 3 | 1 | 0 | -1 | 0 | 0 | 0 | | | | |
| \$1,300,000.00 to \$1,350,000.00 | 64 | 15 | 6 | 1 | 0 | -1 | 0 | 0 | 0 | | | | |
| \$1,350,000.00 to \$1,400,000.00 | 8 | 6 | 4 | 2 | 0 | -2 | -4 | -6 | -8 | 37 | -2 | -74 | +148 |
| \$1,400,000.00 to \$1,450,000.00 | 19 | 3 | 2 | 3 | 4 | 3 | 3 | 0 | 0 | | | | |
| \$1,450,000.00 to \$1,500,000.00 | 152 | 18 | 8 | 6 | 0 | 16 | -12 | 0 | 0 | | | | |
| fx | 65 | 19 | 19 | 12 | 7 | 13 | 9 | 1 | 0 | Σ = 145 | | Σfyd'y = +34 | Σfy(d'y)² = 418 |
| d'x | -4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 | | | | |
| fxd'x | -260 | -57 | -38 | -12 | 0 | 13 | 18 | 3 | 0 | Σfxd'x = -333 | | | |
| fx(d'x)² | 1040 | 171 | 76 | 12 | 0 | 13 | 36 | 9 | 0 | Σfx(d'x)² = 1357 | | | Σfxd'xd'y = 18 |

$$r = \frac{N \sum f d'x d'y - (\sum f x d'x)(\sum f y d'y)}{\sqrt{[N \sum f x d'x]^2 - (\sum f x d'x)^2} [N \sum f y d'y]^2 - (\sum f y d'y)^2}$$

$$r = \frac{(145)(18) - (-333)(+34)}{\sqrt{[145(1357) - (-333)^2] [145(418) - (34)^2]}}$$

$$r = +.513$$

TABLE XII

CORRELATION TABLE OF THE FINANCIAL STATUS OF THE SELECTED SECONDARY
SCHOOL DISTRICTS AND THE YEARS IN PRESENT POSITION OF THE TEACHERS EMPLOYED

| YEARS OF TENURE IN | | | | | | PRESENT POSITION (X) | | | | | | |
|------------------------------|------------------|-----------------|----------------|-------------|---------------|----------------------|--------------|---------------------------|------------------------|---------------------------|-------|----------------------|
| Class Interval | 1 to 5 | 6 to 10 | 11 to 15 | 16 to 20 | 21 to 25 | 26 to 30 | 31 to 35 | | | | | |
| Mid-value | 3 | 8 | 13 | 18 | 23 | 28 | 33 | | fy | d'y | fyd'y | fy(d'y) ² |
| \$900,000.00 to \$999,999.00 | -6 25 -150 | -4 12 -48 | -2 7 -14 | 0 2 0 | 2 4 8 | 4 1 4 | 6 1 6 | | 52 | 3 | 104 | 208 |
| 800,000.00 to 899,999.00 | -3 16 -48 | -2 4 -8 | -1 4 -4 | 0 0 0 | 1 3 3 | 2 3 6 | 3 0 0 | | 20 | 1 | 30 | 30 |
| 700,000.00 to 799,999.00 | 0 0 0 | 0 0 0 | 0 0 0 | 0 0 0 | 0 0 0 | 0 0 0 | 0 0 0 | | 0 | 0 | 0 | 0 |
| 600,000.00 to 699,999.00 | 3 19 57 | 2 4 8 | 1 1 1 | 0 1 0 | -1 0 0 | -2 1 -2 | -3 0 0 | | 26 | -1 | -26 | -26 |
| 500,000.00 to 599,999.00 | 6 25 168 | 4 6 24 | 2 1 2 | 0 1 0 | -2 1 -2 | -4 0 0 | -6 0 0 | | 37 | -3 | -74 | -148 |
| fx | 88 | 26 | 13 | 4 | 8 | 5 | 1 | N = 145 | $\sum fy d'y$ = +34 | $\sum fy(d'y)^2$ = 412 | | |
| d'x | -3 | -2 | -1 | 0 | 1 | 2 | 3 | | | | | |
| fxd'x | -264 | -52 | -13 | 0 | 8 | 10 | 3 | $\sum fxd'x$ = -308 | | | | |
| fx(d'x) ² | 792 | 104 | 13 | 0 | 8 | 20 | 9 | $\sum fx(d'x)^2$ = 946 | | $\sum fd'xd'y = 11$ | | |

$$r = \frac{N \sum fd'xd'y - (\sum fxd'x)(\sum fy d'y)}{\sqrt{[N \sum fx(d'x)^2 - (\sum fxd'x)^2][N \sum fy(d'y)^2 - (\sum fy d'y)^2]}}$$

$$r = \frac{(145)(11) - (-308)(+34)}{\sqrt{[145(946) - (-308)^2][145(412) - (+34)^2]}}$$

$$r = +.242$$

TABLE XIII

CALCULATION OF THE BI-SERIAL r BETWEEN THE FINANCIAL STATUS OF THE SELECTED SECONDARY SCHOOL DISTRICTS AND THE CREDENTIALS HELD BY THE TEACHERS EMPLOYED

| Assessed Valuation per teacher employed | Regular Creden- tials | Emergency Creden- tials | f |
|---|-----------------------------|-------------------------------|-----|
| \$900,000.00 - \$999,999.00 | 62 | 0 | 62 |
| 800,000.00 - 899,999.00 | 33 | 0 | 33 |
| 700,000.00 - 799,999.00 | 0 | 0 | 0 |
| 600,000.00 - 699,999.00 | 37 | 4 | 31 |
| 500,000.00 - 599,999.00 | 41 | 3 | 44 |
| TOTALS | 163 (p) | 7 (q) | 170 |

$M = \$772,353$; mean of all scores ($N = 170$)

$\sigma = \$168,100$; σ of all scores ($N = 170$)

$M_p = \$779,449$; mean of regular credentials

$M_q = \$607,143$; mean of emergency credentials

$p = .96$; proportion having regular credentials

$q = .04$; proportion having emergency credentials

$z = .086$; height of ordinate separating 96% from 4% in a normal distribution

$$r = \frac{M_p - M_q}{\sigma} \cdot \frac{pq}{z}$$

$$= \frac{\$779,449 - \$607,143}{\$168,100} \times \frac{(.96)(.04)}{.086}$$

$$= + .457$$

TABLE XIV

CALCULATION OF THE BI-SERIAL r BETWEEN THE FINANCIAL STATUS OF THE SELECTED SECONDARY SCHOOL DISTRICTS AND THE ACADEMIC DEGREES HELD BY THE TEACHERS EMPLOYED

| Assessed Valuation per teacher employed | Master's Degree | Bachelor's Degree | f |
|---|--------------------|----------------------|-----|
| \$900,000.00 - \$999,999.00 | 19 | 32 | 51 |
| 800,000.00 - 899,999.00 | 7 | 21 | 28 |
| 700,000.00 - 799,999.00 | 0 | 0 | 0 |
| 600,000.00 - 699,999.00 | 4 | 21 | 25 |
| 500,000.00 - 599,999.00 | 10 | 26 | 36 |
| TOTALS | 100 (p) | 40 (q) | 140 |

$M = \$734,281$; mean of all scores ($N = 140$)

$\sigma = \$167,500$; σ of all scores ($N = 140$)

$M_p = \$802,500$; mean of Master's Degrees

$M_q = \$768,000$; mean of Bachelor's Degrees

$p = .29$; proportion having Master's Degrees

$q = .71$; proportion having Bachelor's Degrees

$z = .342$; height of ordinate separating 29% from 71% in a normal distribution

$$\begin{aligned}
 r &= \frac{M_p - M_q}{\sigma} \cdot \frac{pq}{z} \\
 &= \frac{\$802,500 - \$768,000}{\$167,500} \times \frac{(.29)(.71)}{.342} \\
 &= + .146
 \end{aligned}$$

Interpreting the findings. In answering the statement of the problem in Chapter I:

Is there a relationship between the financial status and the academic preparation and experience of teachers in selected secondary schools,

a summary of the findings is presented:

1. College units completed. The coefficient of correlation between the financial status and college units completed was found to be $+.078$. The degree of relationship between the two factors is negligible.
2. Total years teaching experience. The coefficient of correlation between the financial status and the total teaching experience of the teachers was found to be $+.513$, which indicates a very slight, but insignificant, relationship between the two factors.
3. Tenure in present position. The coefficient of correlation between the financial status and number of years of tenure was found to be $+.242$, which signifies that hardly any relationship exists between the two factors.
4. Credentials held. The bi-serial (r) between financial status and credentials was found to be $+.457$. This indicates a very slight, but insignificant, relationship between the two factors.
5. Degrees held. The bi-serial (r) between the financial status and degrees held was found to be $+.146$.

This coefficient of correlation as shown is negligible. With the permission of the thesis chairman, five returns concerning degrees were deleted from the study to make possible the use of the bi-serial (r). The five returns had less than the Bachelor's Degree.

In the consideration of total years teaching experience, credentials, and tenure of position of the selected secondary teachers to the study, it can be noted in summarizing that a slight degree of relationship does exist between financial status and academic preparation; but it cannot be emphasized positively, as it is too small to be of significance.

When relating financial status to college units completed or degrees held, it is shown that practically no relation is present by studying the coefficients of correlation.

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

Purpose of the chapter. The purpose of this chapter is to present the conclusions drawn from the findings of the study and to make recommendations based on these conclusions.

Conclusions. The conclusions of this study are presented below:

1. In terms of equality of educational opportunity afforded the students in the selected secondary schools of San Joaquin County, it is significant to conclude that the academic preparation of their instructors in the main provides them with equal opportunities in relation to instruction. More than 96 per cent of all the teachers in the study revealed they had more than 120 college semester units, and 45.5 per cent had more than 150 units, while only 3.4 per cent were found to have less than a Bachelor's Degree.

2. A wide range of available wealth per teacher employed exists. Lodi High School with \$921,607.00 per teacher, and Manteca High School with \$519,603.00 per teacher, reveal a great difference in ability to support their educational programs.

3. Other studies directly related to this study were either not found or were obscure, indicating that further research could be made in this area of study.

4. Evidence of professional growth was found as shown by the high number of selected teachers with Master's Degrees. Over 87 per cent of the total teachers responding held Master's Degrees.

5. As far as this study is concerned, there is a very slight degree of relationship between the academic preparation and experience of the teachers and the financial status of the selected districts.

Recommendations. The recommendations from this study of the relationship between the academic preparation and experience of teachers and the financial status are presented below:

1. It is recommended that similar studies be made in other California counties to make a comparative analysis.

2. It is recommended that a study be made to determine why such vast differences of available wealth of school districts exist in one county.

3. It is recommended that a study be made to find if the employment of emergency credentialed personnel on

the secondary level can be eliminated.

4. It is recommended that further study be made to determine other characteristics that may be related to teachers and finance.

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APPENDIX A

STATEMENT OF PROCEDURE QUESTIONS CONCERNING
THE FINANCIAL STATUS OF THE SELECTED SECONDARY
SCHOOL DISTRICTS

1. What are the assessed valuations of the selected secondary school districts?
2. What are the assessed valuations per teacher employed by each selected secondary school district?
3. How do the districts rank in assessed valuations?
4. How do the districts rank in assessed valuations per teacher?
5. What is the size of the school in relation to the number of teachers employed?
6. What is the mean number of employed teachers?
7. What is the mean assessed valuation?
8. What is the mean assessed valuation per teacher?
9. What is the range of assessed valuation?
10. What is the range of assessed valuation per teacher?
11. What is the frequency distribution of wealth of the selected secondary school districts?

APPENDIX B

STATEMENT OF PROCEDURE QUESTIONS CONCERNING THE
ACADEMIC PREPARATION AND EXPERIENCE OF THE TEACHERS
IN THE SELECTED SECONDARY SCHOOL DISTRICTS

1. What are the total units earned above the high school diploma of the teachers in the selected secondary school districts?
2. What are the degrees held by the teachers of the selected secondary school districts?
3. What are the credentials held by the teachers in the selected secondary school districts?
4. What experience have the teachers in the selected secondary school districts?
5. What tenure in their present position do the teachers in the selected secondary school districts have?

APPENDIX C

PRELIMINARY TABLE

NUMBER OF TEACHERS IN SELECTED SECONDARY
SCHOOLS IN SAN JOAQUIN COUNTY, 1951-1952
ALPHABETICAL

| <u>School District</u> | <u>Number of Teachers</u> |
|------------------------|---------------------------|
| Escalon Union High | 17 |
| Linden Union High | 15 |
| Lodi Union High | 62 |
| Manteca Union High | 39 |
| Ripon Union High | 14 |
| Tracy Union High | 33 |

PRELIMINARY TABLE

ASSESSED VALUATIONS OF SELECTED SECONDARY
SCHOOLS OF SAN JOAQUIN COUNTY, 1961-1962
ALPHABETICAL

| School District | Assessed Valuation | Rank |
|--------------------|--------------------|------|
| Escalon Union High | \$11,675,590.00 | 4 |
| Linden Union High | 8,088,860.00 | 6 |
| Lodi Union High | 57,139,625.00 | 1 |
| Manteca Union High | 15,088,475.00 | 3 |
| Sipon Union High | 8,621,110.00 | 5 |
| Tracy Union High | 27,471,328.00 | 2 |

PRELIMINARY TABLE

ASSESSED VALUATIONS PER TEACHER EMPLOYED IN
SELECTED SECONDARY SCHOOLS OF SAN JOAQUIN COUNTY, 1951-1952
ALPHABETICAL

| School District | Assessed Valuation per Teacher | Rank |
|--------------------|-----------------------------------|------|
| Escalon Union High | \$686,799.00 | 3 |
| Linden Union High | 535,217.00 | 5 |
| Lodi Union High | 921,607.00 | 1 |
| Manteca Union High | 519,603.00 | 6 |
| Hipon Union High | 615,794.00 | 4 |
| Tracy Union High | 832,464.00 | 2 |

APR 11 1964

Double post card consisting of explanatory letter
and questionnaire mailed to teachers included in survey.

July 8, 1958

Dear Teacher,

A graduate study is being conducted at the College of the Pacific to determine the experience and academic preparation of teachers in the public schools of San Joaquin County.

Please fill in and return the attached postal card at your earliest convenience. In so doing, consider this applicable to your teaching position as of the 1951-1952 school year.

John M. Williams
Superintendent of Schools
San Joaquin County

Please check in the spaces provided the number of college units you have completed and the degrees you now hold.

| <u>Semester Units Completed</u> | <u>Degrees Held</u> |
|---------------------------------|-------------------------------|
| 0-29 | High School Diploma |
| 30-59 | A.A. Degree M.A. Degree |
| 60-89 | A.B. Degree Ed.D. Degree |
| 90-119 | B.S. Degree Ph.D. Degree |
| 120-149 | B.A. Degree Others |
| 150-179 | D.Ed. Degree |
| Above 180 | M.A. Degree |

300 Units = One College Year; An A.B. = 120 Units.
Please indicate your total number of years teaching experience.

Please indicate the total number of years in your present position.

APPENDIX E

APPENDIX II

APPENDIX G

| School district | College semester units completed | | | | | | Highest academic degree of the selected teachers | | | | | | | | | |
|------------------|----------------------------------|----------|----------|----------|----------|----------|--|-------------|------------------|---------------------|-------------------|-----------------------|-------|----------------|-------------------|-------|
| | 0 to 29 | 30 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | H. S. Diploma | Assoc. Arts | Bachelor of Arts | Bachelor of Science | Bachelor of Music | Bachelor of Education | Other | Master of Arts | Master of Science | Other |
| Reference number | | | | | | | | | | | | | | | | |
| (18) | | | | | | | 1 | | 7 | 3 | | | | 1 | | |
| Escalon | | 1 | | | 4 | 6 | 3 | | | | | | | | | |
| (39) | | | | | | | 1 | | 6 | 2 | 1 | | | 1 | | |
| Linden | | | 1 | | 3 | 6 | 2 | | | | | | | | | |
| (42) | | | | | | | 1 | | 24 | 7 | | | | 15 | 3 | NA |
| Lee | | | 1 | | 3 | 22 | 21 | | | | | | | | | |
| (48) | | | | | | | | | 10 | 7 | | | | 5 | 2 | 2 |
| Manteca | | | | | 3 | 13 | 6 | | | | | | | | | |
| (56) | | | | | | | | | 6 | 2 | | 1 | | 2 | 1 | |
| Ripon | | | | | 3 | 5 | 4 | | | | | | | | | |
| (63) | | | | | | | 1 | 1 | 17 | 4 | | | | 7 | | |
| Tracy | | 1 | 1 | | 7 | 14 | 7 | | | | | | | | | |
| TOTALS | 6 | 2 | 3 | 0 | 29 | 66 | 45 | 4 | 1 | 70 | 27 | 1 | 1 | 0 | 31 | 6 |

TALLY SHEET
NUMBER OF TEACHERS RESPONDING FOR COLLEGE UNIT, ACADEMIC DEGREES,
EXPERIENCE, TENURE AND NUMBER OF CREDENTIALS HELD
BY TEACHERS IN THE SELECTED SCHOOLS

| Credentials held | | | | Teaching Experience and | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-------------------------|-----------|---------|-----------------------------|------------|----|----|----|---|----|---|---|---|----|----|----|----|----|----|----|----|----|----|----|---|
| Doctor of Education | Doctor of Philosophy | Emergency | Regular | Experience and Tenure | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| | | | | | Experience | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 16 | Tenure Experience | 1 | 3 | 2 | 5 | | | | | 2 | 1 | | | | 1 | | | | | | | |
| | | | | | 3 | 1 | 1 | | 1 | | | | | | 1 | | | | | | 1 | | | | |
| | | 3 | 13 | Tenure Experience | 5 | 4 | 1 | 1 | | | | | | | | | | | | | | | | | |
| | | | | | 2 | 6 | 7 | 1 | 2 | 3 | | 1 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | | | 2 | 2 | 1 | 2 |
| | | 0 | 63 | Tenure Experience | 6 | 7 | 7 | 2 | 3 | 3 | 2 | 3 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | | 1 | | | 1 | |
| | | | | | 4 | 4 | 1 | 5 | | 1 | 1 | | | | | | | 1 | | 1 | | | 1 | | |
| | | 1 | 26 | Tenure Experience | 10 | 4 | 3 | | | 2 | 3 | 1 | | | 1 | | | | | | 1 | | | | |
| | | | | | 3 | 3 | 1 | 2 | | | 1 | | | | | | | | 1 | 1 | | | | | |
| | | 3 | 11 | Tenure Experience | 3 | 3 | | 2 | | | 1 | | | | | | | | 1 | 1 | | | | | |
| | | | | | 4 | 4 | | 3 | 1 | | 1 | | | 2 | 2 | 1 | 2 | 1 | 1 | | | 1 | | | |
| | | 0 | 33 | Tenure | 6 | 4 | 1 | 2 | 3 | 2 | | | 1 | 1 | 1 | | 2 | | 1 | | | | | | |
| 0 | 0 | 7 | 163 | | 46 | 46 | 25 | 27 | 9 | 12 | 9 | 6 | 5 | 12 | 5 | 3 | 6 | 9 | 6 | 4 | 4 | 3 | 2 | 3 | |

145

170

| Tenure in Position | | | | | | | | | | | | | | | | | | | Questionnaires | | | |
|--------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----------------------------------|------|----------|-------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | Totals for Experience and Tenure | Cent | Returned | Per cent of reply |
| | | | | | | | | | | | | | | | | | | | 14 | | | |
| | | | | | | | | | | | | | | | | | | | 14 | 17 | 14 | 82 |
| | | | | | | | | | 1 | | | | 1 | 1 | | | | | 11 | | | |
| | | | | | | | | | | | | | | | | | | | 11 | 15 | 11 | 73 |
| 1 | | | | 1 | 1 | 2 | 2 | 2 | 1 | | 1 | | | | | | | 1 | 53 | | | |
| | 1 | | 2 | 1 | | | | | 1 | | | | | 1 | | | | | 52 | 62 | 52 | 83 |
| 3 | | | 1 | | | | | | | | | | | 1 | | | | | 26 | | | |
| | 1 | | | | | | | | | | | | | | | | | | 25 | 29 | 26 | 89 |
| | | | | | | | | | | | | | | | | | | | 12 | | | |
| | | | | | | 1 | | | | | | | | | | | | | 12 | 14 | 12 | 85 |
| | | 1 | | | 1 | | | | 1 | | 2 | 1 | | | | | | | 30 | | | |
| | | | 3 | | 2 | | | | 1 | | | | | | | | | | 30 | 33 | 30 | 90 |
| 1 | 3 | 1 | 6 | 3 | 1 | 6 | 4 | 2 | 5 | 1 | 2 | 3 | 2 | 2 | | | | 1 | 145 | 145 | 170 | 854 |